

Situations that may use the MAXDAILY, MXDYBYR, or, MAXDCONT option but may necessitate some external post-processing afterwards to calculate a design value include:

- The receptor network is divided into sections and an AERMOD run, with all sources and years, is made for each network.
  - A receptor network of 20,000 receptors is divided into four 5,000 receptor sub-networks. Ten facilities are modeled with five years of NWS data in one AERMOD run for each receptor network, resulting in four AERMOD runs. After the AERMOD runs are complete, the MAXDAILY, MXDYBYR, or, MAXDCONT results for each network can be re-combined into the larger network.
- All sources and receptors are modeled in an AERMOD run for each year.
- Ten facilities are modeled with five years of NWS data. All facilities are modeled with all receptors for each year individually, resulting in five AERMOD runs. MAXDAILY, MXDYBYR, or, MAXDCONT output can be used and post-processed to generate the necessary design value concentrations. The receptor network is divided and each year is modeled separately for each sub-network with all sources.

Ten facilities are modeled with five years of NWS data for 20,000 receptors. The receptor network is divided into four 5,000 receptor networks. For each sub-network, all ten facilities are modeled for each year separately, resulting in twenty AERMOD runs. MAXDAILY, MXDYBYR, or, MAXDCONT output can be used and post-processed to generate the necessary design value concentrations.

#### **9. Use of modeling results to inform nonattainment/attainment boundaries**

Dispersion modeling is a tool that could be used to examine the spatial extent of potential violations of the 1-hour SO<sub>2</sub> NAAQS. Thus, in accordance with this guidance, refined dispersion modeling could be used to inform boundary determinations in support of the SO<sub>2</sub> designations process, i.e.

1. For an area that contains a violating monitor, modeling could be used to inform decisions on the appropriate nonattainment boundary in conjunction with other factors listed in Attachment 2.
2. For an area without a violating monitor, modeling could be used as evidence of an area's attainment status and also to inform decisions on the appropriate (attainment or nonattainment) boundary.

The shape and size of the nonattainment or attainment area is recommended by the state and either adopted or modified by EPA. For initial designations, it is expected that states will focus on areas with violating monitors. If a county contains a violating monitor, that county would be